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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Rahul Mehra

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EXAMINER

VENT, JAMIE J

ART UNIT

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2621

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DELIVERY MODE

03/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/802,021	MEHRA ET AL.	
	Examiner	Art Unit	
	JAMIE Jo VENT	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Prosecution Application

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 4, 2007 has been entered.

Response to Argument

2. Applicant's arguments filed December 4, 2007 have been fully considered but are not persuasive. On pages 6-7 applicant argues that Schindler et al (US 5,995,155) in view of Geldman et al (US 5,740,466) in further view of Blatter et al (US 5,754,651) fails to disclose, teach, or suggest, the following limitation, "commands for the control system for automating the bulk transfer of said data to and from the storage means to be intermixed in said buffer with read and write commands for the control of the storage of the data in the storage means" as recited in Claim 1. It is taught by Geldman the transfer of bulk data to and from the storage means (Column 3 Lines 47+ through Column 4 Lines 1-17) based on commands (Column 2 Lines 1-15). Furthermore, it is taught by Blatter to provide intermix read and write commands for control of storage data (Column 5 Lines 40-56) and thereby meets the limitations based on generic

commands being sent to the FIFO. Although, all of applicants points are understood the examiner can not agree.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1, 4, 5, 6, 7, 8, 9, 10, 11, 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schindler et al (US 5,995,155) in view of Geldman et al (US 5,740,466) in further view of Blatter et al (US 5,754,651).

[Claim 1]

In regard to claim 1, Schindler et al discloses a receiver for digital data comprising:

- A receiver for digital data which is broadcast from a remote location
(Figure 1 shows a satellite 112 and the antenna connected to the personal computer 118 therein, a receiver 316 is included in the personal computer 118 shown in Figure 3 as further described in column 7 line 46-64 and column 10 line 15-24);
- said receiver including or connecting to storage means which allows the selective storage of received data (A storage system includes a tape drive 330, a disk drive 332, a CD ROM drive 334, a diskette drive 336, and a RAM 314. Different storages are selected to store different information.

Figure 3 shows the storage as further described in column 9 line 47-line and column 10); and

- A control system for the control of the storage means and the storage of data (A control system includes a handheld remote 124, keyboard 126, a RF receiver 324 and a processor 310. Figure 9A and figure 10 show the handheld remote 124 and keyboard 126, which are further described in column 9 line 12-14; Figure 3 shows the RF receiver 324 and processor 310 as further described in column 9 line 26-46); however fails to disclose the single first in first out buffer which uses generic commands including for the control system intermixed in said buffer commands for the control of storage of the data in the storage means and automating the bulk transfer of said data to and from said storage means.

Geldman et al discloses a SCSI FIFO 44 that holds instructions as seen in figure 2 and further disclosed in column 12, line 12-17. The use of instructions controls the storage of the data through the storage buffer commands for greater accuracy of calculations as disclosed by Geldman. Furthermore, Geldman teaches the transfer of bulk data to and from the storage means as described in Column 2 Lines 47+ through Column 4 Lines 1-17. The system provides the ability to transfer bulk data to and from the storage containing instructions regarding the control of the data and the data being intermixed signals. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the system transferring of data, as disclosed by Schindler et al, and further teach the system to use instructions for controlling the

transferring of buffer information to the storage means, as taught by Geldman, to allow for proper and efficient data transfer.

Geldman et al however fails to disclose that the FIFO additionally contains commands for both control system and control of the storage of data in the storage system. Blatter et al discloses a processing of storage of digital data wherein the storage is based on classification of specific data. Furthermore, as described in Column 5 Lines 40-56 describes the FIFO containing commands for information regarding the control unit, which controls the system, as well as commands for control of storage, as previously recited by Geldman et al. The ability of both commands to be stored in the FIFO provides a more efficient data transfer process. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the FIFO buffer, disclosed by Schindler, and incorporate the buffer to hold the instructions, as disclosed by Geldman, to synchronized the data and the instruction during system execution and additionally contain both control system commands and control of storage within the FIFO, as disclosed by Blatter et al, to provide an effective transfer of data.

[Claim 4]

In regard to Claim 4, Schindler et al discloses a system contains a receiver and a CPU as shown in Figure 3 and described in column 9 line 33-36; however, fails to discloses the receiver which characterized in that the analysis, storage and directing of the incoming data into the receiver is performed by a control processing unit (CPU) in the receiver. Geldman et al teaches that the analysis, storage, and directing incoming data

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into the system is performed by the CPU as seen in figure 1 and described in column 2 lines 56-63 and column 3 lines 48-65. Thereby the analysis and storage of incoming data can be done quickly. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system, disclosed by Schindler, and incorporate the receiver with analysis, storage, and directing of incoming data, as disclosed by Geldman et al, to achieve fast synchronous data transfers.

[Claim 5]

In regard to claim 5, Schindler et al discloses a system contains a receiver that can control which data to be stored as described in Column 22 Lines 42-43 and Column 4 Lines 10-13; however, fails to disclose that the receiver in the system can control which data can be stored. In addition, Schindler et al fails to disclose the receiver can generate the signals for control buffer to allow the storage of the appropriate data. Geldman et al teaches signals for control of the buffer to allow the storage of the appropriate data (i.e. a WRITE ENABLE signal in case of a write to the data buffer RAM) as disclosed in column 17, line 1-11 and thereby information can be stored according to the WRITE ENABLE signal. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the receiver system, disclosed by Schindler, with the write control signal, disclosed by Geldman et al, so that less storage will be used when selected portion of the data is recorded and thereby providing a cost efficient system.

[Claim 6]

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In regard to claim 6, Schindler et al discloses a system contains a receiver, a CPU, and FIFO buffer. The FIFO buffer can include data which is altered by the CPU as described in Column 10, lines 43-49 and Column 11, lines 9-11; however, fails to disclose that the CPU can load the command signals data into the FIFO. Geldman et al teaches the instructions can be hold in the FIFO as described in Column 12, line 14-17. Thereby the timing of executing the command can be adjusted accordingly in the FIFO buffer. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system, disclosed by Schindler, and incorporate the FIFO buffer, disclosed by Geldman, to minimize the effects of access latency to achieve a higher speed and to synchronize the command signal and the data in a fast rate.

[Claim 7]

In regard to claim 7, Schindler et al discloses a system contains a receiver and a CPU wherein the command signal instructs the transfer of data to and/or from the data storage means as described in Column 22, line 43-line48; however, fails to disclose the command can also be generated from the CPU. Geldman et al discloses the CPU generates the command signals as described in column 19, line 1-10 and thereby having no additional hardware that will be needed for the command signals. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention to use the system, disclosed by Schindler et al, and incorporate the CPU, disclosed by Geldman, to reduce the amount of hardware so that the cost to produce the system will decrease.

[Claim 8]

In regards to claim 8, Schindler et al discloses a system that contains a receiver wherein the command signal alter the start time for the storage of portions of incoming data as described in Column 21, line 46-57 and Column 22, line 1-9; however, Schindler et al fails to use a FIFO buffer to hold the command. Geldman et al teaches that command signals in the FIFO Buffer as described in Column 12, line 12-17. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the system, disclosed by Schindler et al, and incorporate a system with the FIFO buffer with command signals, disclosed by Geldman. Thereby making the system have a fast synchronous transfer's rate and reduce the amount of hardware use in the control system due to exclusion of a remote control or a keyboard.

[Claim 9]

In regard to claim 9, Schindler et al discloses a system contains a receiver, FIFO buffer and attached storage means shown in figure 3 and described in column 22 line 10-15; however, fails to disclose instruction in the FIFO in a generic form allows any possible register read/write command to be sent from/to the attached storage means. Geldman et al teaches that the instruction in the FIFO buffer as described in column 12, line 12-16. Geldman et al also teaches that a FIFO is used for any possible register read/write command to be sent from/to the attached storage means as described in column 13, line 46-57. Thereby the read/write command and the data to be read/write can be synchronized at the same rate. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system,

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disclosed by Schindler et al, and incorporate a system with the instruction FIFO, disclosed by Geldman, to prevent overruns and under runs during direct map access since the timing can be adjust by the FIFO buffer.

[Claim 10]

In regard to claim 10, Schindler et al discloses a receiver and attached storage means as shown in figure 3. Furthermore, the storage means is an ATA or ATAPI compatible device as seen in figure 3 which shows a CD ROM drive 334 (ATA stands for Advanced Technology Attachment, compatible device including Compact Disk Read Only Memory, which is CD ROM); however, Schindler et al fails to include the ATA compatible inside the receiver. It is well known in the art that the ATA or ATAPI compatible device can be place inside a receiver as storage. It would increase the storage capacity infinitely when use CD ROM for the memory storage system inside a receiver. Furthermore, when one CD is full, it can be replaced with a new CD so that the recording section can continue without losing a lot of information. Therefore, the examiner takes official notice that it would be obvious to use an ATA or ATAPI compatible device inside a receiver for recording purpose.

[Claim 11]

In regard to claim 11, Schindler et al discloses a receiver and a HDD as shown in figure 3. Schindler et al also discloses that bulk transfer of the streamed data to the storage means as described in column 3 lines 51-67 and column 4 lines 1-11; however, fails to address any addition information, which is not used to provide the register read/write command to the HDD. Geldman et al discloses any additional information which is not

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used to provide the register read/write commands to the HDD is used to instigate the automated bulk transfer to the streamed data to the storage means as described in column 6, line 41-63. Additional Information includes a Halt instruction, which is not used to provide the register read/write command to the HDD, is used instigate the automated bulk transfer of the streamed data to the storage means. Thereby the data transfer process can be stop at anytime when error occurs during the transfer process. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made use the receiver and the HDD, disclosed by Schindler et al, and incorporate the additional information, as disclosed by Geldman et al, to increase the robustness of the overall system performance.

[claim 13]

In regard to Claim 13, Schindler discloses a receiver wherein said command signals in the first in first out buffer allows a combined set of command signals to be generated (Column 19, line 1-10 describes the combined command signals of the FIFO).

[claim 14]

In regard to Claim 14, Schindler discloses a receiver wherein the storage means is an advanced technology attachment pack interface compatible device (Figure 1 shows the system wherein it is well known in the art that the devices have an interface compatible device).

[claim 15]

In regard to Claim 15, Schindler discloses a receiver that is connected to a storage means that allows selective storage of received data (Figure 1 shows a receiver that is connected to a storage device CPU for selective storage of received data).

[claim 16]

In regard to Claim 16, Schindler et al discloses a receiver for digital data which is broadcast from a remote location, as previously discussed in Claim 1, with the additional limitation of the storage means which allows for selective storage of received data (column 4, line 10-14 data is recorded and displayed according to user query).

[claim 17]

In regard to Claim 17, Schnindler et al discloses a receiver wherein the data required during said bulk transfer is a multiplex of many data streams (Figure 1 shows a satellite 112 and the antenna connected to the personal computer 118 therein, a receiver 316 is included in the personal computer 118 shown in Figure 3 as further described in column 7 line 46-64 and column 10 line 15-24).

4. Claim 2 and 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Schindler et al (US 5,995,155) in view of Geldman et al (US 5,740,466) in further view of Blatter et al (US 5,754,651) and in further view of Murtha et al US (4,166,289).

[Claim 2]

In regards to claim 2, Schindler et al discloses receiver wherein the data to be stored includes block data as described in column 3 line 65-67 and column 4 line 1-11; however fails to specify the data to be store can also comprises instruction data and the

paths for said data are decouple. Geldman et al discloses the data to be stored also contains instruction data as described in column 2, line 5-8; however, fail to address the data to be store comprises block data and the path for said for the data are decoupled. Murtha et al teaches that the path for said data are decoupled as seen in figure 1A and further described in column 6, line 26-34. Thereby a fast transfer rate from one location to another can be achieved. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the stored data in the receiver, disclosed by Schindler in view of Geldman et al, and the data, describes by Blatter et al, and incorporate the data paths, as disclosed by Murtha, to increase the overall system throughput and reduce the number of data path to simplify the system.

[Claim 3]

In regards to claim 3, Schindler et al discloses a system contains a receiver wherein that the data generated for the buffer is compatible with the user query that are used to automate the bulk transfer of the data to and from the storage means as described in column 11 line 9-1, column 3 line 50-67, column 4, line 1-9, column 4, line 10-14 and column 22, line 42-43. The compatibility between the data generated for the buffer and the command is further described in column 12, line 55-66 as seen in figure 8; however, Schindler et al fails to specify the query command is stored in the receiver. Geldman et al teaches the commands that are used to automate the bulk transfer of the data to and from the storage means and the command is stored in memory as described in column 2, line 5-8; however, fails to specify the data generated for the buffer is compatible with the commands. Murtha et al fail to disclose that the data

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generated for buffer is compatible with the commands that are used to automate the bulk transfer of the data to and from the storage means. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the system contains receiver, disclosed by Schindler et in view of Geldman, and incorporate the commands, as disclosed by Blatter et al, to increase the robustness of the overall system performance and to achieve a fast synchronous rate, as recited by Murtha.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMIE Jo VENT whose telephone number is (571)272-7384. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John W. Miller/
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Unit 2623

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